Index of Claims

| App | lic | ati | on | /Control | No |
|-----|-----|-----|----|----------|----|

10/038,989

Examiner

Michael T. Thier

Applicant(s)/Patent under Reexamination

MIERNIK ET AL.

**Art Unit** 

2617

| <b>√</b> | Rejected |
|----------|----------|
| =        | Allowed  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| Z | Non-Elected  |  |  |  |  |  |
|---|--------------|--|--|--|--|--|
| _ | Interference |  |  |  |  |  |

| A | Appeal   |
|---|----------|
| o | Objected |

|              |                       | _  |          |                   |          |              | '        |          | _        | _               |  |
|--------------|-----------------------|--|----------|-------------------|----------|--------------|----------|----------|----------|-----------------|--|
| Cla          | im                    | Date   |          |                   |          |              |          |          |          |                 |  |
| Final        | Original              | 90/9/9   |          |                   |          |              |          |          |          |                 |  |
| _            | 1                     | -  |          |                   | _        |              |          | $\vdash$ |          | П               |  |
|              | 1<br>2<br>3<br>4<br>5 | -  |          |                   |          |              |          |          |          | П               |  |
|              | 3                     | 1  |          |                   |          |              |          |          |          |                 |  |
|              | 4                     | -<br>√   |          |                   |          |              |          |          | L        |                 |  |
|              | 5                     | 1  |          | $ldsymbol{f eta}$ |          |              |          | L        | L        | Щ               |  |
|              | 6                     | 1  | Ш        | <u> </u>          |          |              |          | <u> </u> | L        | Ц               |  |
| <b></b>      | 7                     | -<br>7   |          | ⊢                 |          | _            |          | <u> </u> | <u> </u> | Н               |  |
| <b></b>      | 8<br>9                | 1  | _        | ┝                 | _        | _            | -        | -        | -        | $\dashv$        |  |
| _            | 10                    | \ <u>`</u>                                       |          | -                 | _        | -            | $\vdash$ | ├        | $\vdash$ | Н               |  |
|              | 11                    | -<br>√   | -        | H                 |          |              |          | ┝        | ┢        | Н               |  |
| $\vdash$     | 12                    | 1  | $\vdash$ |                   |          | Н            | H        | $\vdash$ | $\vdash$ | H               |  |
|              | 12<br>13              | -  |          |                   | $\vdash$ |              | $\vdash$ | $\vdash$ |          | $\Box$          |  |
|              | 14                    | 1  |          |                   | Г        | Г            | П        |          | T        |                 |  |
|              | 15                    | 1  |          |                   |          |              |          |          |          |                 |  |
|              | 15<br>16<br>17        | -  |          |                   |          |              |          |          |          |                 |  |
|              | 17                    | 1  |          |                   |          |              |          |          |          | Ш               |  |
|              | 18<br>19              | 1  | _        | L_                | L        | Ш            |          | ᆫ        |          | Ш               |  |
|              | 19                    | 1  | <u> </u> | <u> </u>          | _        | $oxed{oxed}$ | Ш        | _        |          | Ш               |  |
|              | 20                    | <u> </u>   | <u> </u> | <u> </u>          | <u> </u> | <u> </u>     |          | <u> </u> |          | $\square$       |  |
| _            | 21<br>22              | ᆖ  | <u> </u> | -                 |          | -            |          | -        | _        | $\vdash$        |  |
| <del> </del> | 22                    | =  | -        |                   | ┝        | $\vdash$     |          | ├        | -        | $\vdash\dashv$  |  |
|              | 23<br>24              | 늘  | -        | -                 | $\vdash$ | H            | _        | ├─       | $\vdash$ | $\vdash$        |  |
|              | 25                    | =  | H        | $\vdash$          | -        | _            |          | ┢        | $\vdash$ | H               |  |
|              | 26                    | ▐▔   |          | _                 |          |              |          |          |          | П               |  |
|              | 26<br>27              | =  |          |                   |          |              |          |          |          |                 |  |
|              | 28<br>29              | Ξ  |          |                   |          |              |          |          |          |                 |  |
|              | 29                    | =  |          | _                 | _        | Щ            |          | 匚        | _        | Ш               |  |
|              | 30                    | -  |          | <u> </u>          | _        |              |          | ļ        |          | Ш               |  |
| <u> </u>     | 31<br>32              | =  |          | _                 | <u> </u> | _            | $\vdash$ | <u> </u> | <u> </u> | Щ               |  |
|              | 33                    | =  |          | H                 | -        |              |          | -        | ├        | Н               |  |
|              | 34                    | =  | -        | $\vdash$          | $\vdash$ | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$ | Н               |  |
| <b>-</b>     | 35                    | =  | $\vdash$ | $\vdash$          | -        |              | -        |          | ├        | $\vdash$        |  |
|              | 36                    | =  | Н        |                   | -        |              | Н        | $\vdash$ | Ι        | Н               |  |
|              | 37                    | =  |          |                   |          |              |          |          | $\vdash$ | Н               |  |
|              | 38                    | =  |          |                   |          |              |          |          |          |                 |  |
|              | 39                    | Ξ  |          |                   |          |              |          |          |          |                 |  |
|              | 40                    |  |          |                   |          |              |          |          |          |                 |  |
|              | 41                    | $ldsymbol{ldsymbol{\sqcup}}$                     |          |                   | L        |              |          | <u> </u> | L_       | Щ               |  |
|              | 42                    | $\vdash$   | <u> </u> | $\vdash$          |          | Н            | $\vdash$ | $\vdash$ | <u> </u> | Н               |  |
| <u> </u>     | 43<br>44              | $\vdash$   | -        | $\vdash$          | $\vdash$ | $\vdash$     | $\vdash$ | ├-       | ┝        | $\vdash \vdash$ |  |
|              | 45                    | -  | -        | <del> </del>      | -        | $\vdash$     | -        | ├        | ⊢        | $\vdash \vdash$ |  |
| -            | 46                    | $\vdash$   | -        | $\vdash$          | $\vdash$ | $\vdash$     | $\vdash$ | ├        | ⊢        | $\vdash \dashv$ |  |
| <u> </u>     | 47                    | 1  | $\vdash$ | $\vdash$          | $\vdash$ | -            | $\vdash$ | $\vdash$ | ┢        | Н               |  |
| $\vdash$     | 48                    |  |          | _                 | _        | $\vdash$     | Н        | $\vdash$ | $\vdash$ | H               |  |
|              | 49                    | <del>                                     </del> |          | $\vdash$          | Ι-       | Т            |          |          | $\vdash$ | Н               |  |
| <b></b>      | 50                    |  |          | $\vdash$          | $\vdash$ | $\vdash$     | ┢═       | $\vdash$ | $\vdash$ | ┌┤              |  |

| Cla      | im       |              |          |              | [         | Date         | е  |              |          |              |   | Cla      | im       |                 |          |   |         | Date     | <del></del> |          |          |           |
|----------|----------|--------------|----------|--------------|-----------|--------------|--|--------------|----------|--------------|---|----------|----------|-----------------|----------|---|---------|----------|-------------|----------|----------|-----------|
|          |          | ,,           |          |              |           |              |  |              |          |              |   |          |          |                 |          |   |         |          |             |          |          |           |
| <u> </u> | Original | 90/9/9       |          |              |           |              |  |              |          |              |   | Final    | Original |                 |          |   |         |          |             |          |          |           |
| -        | Ö        | 9            |          | l            | ı         |              |  |              |          |              |   | ᄕ        | Oij      |                 |          |   |         |          |             |          |          |           |
| _        |          |              |          | L            |           | -            | _  | _            | _        | _            |   |          |          | $\Box$          |          |   | $\perp$ |          |             |          |          | $\vdash$  |
| $\dashv$ | 2        |              | _        | ├─           | $\vdash$  | <del> </del> | H  | H            | ┝        | -            |   |          | 51<br>52 | -               |          |   |         |          |             |          |          |           |
| $\dashv$ | 3        | 7            | _        |              | $\vdash$  | $\vdash$     | -  | H            | ┝        | _            |   |          | 53       | -               | -        | _ | -       |          | _           | _        | $\vdash$ | $\dashv$  |
| -        | 4        | <del>`</del> |          | -            | ┝         | _            | -  | -            | ┝        |              |   |          | 54       | -               | $\dashv$ | - | -       |          |             | Н        |          | $\dashv$  |
| ┪        | 5        | 1            | _        | _            | _         | ┢            |  | -            | ┢─       |              |   |          | 55       |                 |          |   |         |          |             | -        |          | -         |
| ᅥ        | 6        | 1            |          | $\vdash$     | $\vdash$  |              | $\vdash$   | $\vdash$     | $\vdash$ |              |   |          | 56       | $\vdash$        | ᅱ        | _ |         |          |             |          |          | П         |
|          | 7        | -            |          | $\vdash$     |           | _            | <u> </u>   |              | H        |              |   |          | 57       |                 | ᅥ        |   | $\neg$  |          |             | H        |          |           |
|          | 8        | 1            |          |              |           |              | _  |              |          |              |   |          | 58       |                 |          |   | _       |          | -           |          |          |           |
|          | 9        | 1            |          |              | Г         |              |  |              |          |              |   |          | 59       |                 |          |   |         |          |             |          |          |           |
|          | 10       | -            |          |              |           |              |  |              |          |              |   |          | 60       |                 |          |   |         |          |             |          |          |           |
|          | 11       | 1            |          |              |           |              |  |              |          |              |   |          | 61       |                 |          |   |         |          |             |          |          |           |
|          | 12       | 1            |          |              |           |              |  |              |          |              |   |          | 62       |                 |          |   |         |          |             |          |          |           |
|          | 13       | •            |          |              |           |              |  |              |          |              |   |          | 63       |                 |          |   |         |          |             |          |          |           |
|          | 14       | 7            |          | L            |           |              | Ш  |              |          |              |   |          | 64       |                 |          |   |         |          |             |          |          | Ш         |
|          | 15       | 1            |          |              | L         |              | $oxed{oxed}$   |              |          |              |   |          | 65       |                 |          |   |         |          |             |          |          |           |
|          | 16       | ب            |          |              | <u> </u>  | Ш            | $ldsymbol{le}}}}}}}$ | L            | L        |              |   |          | 66       |                 |          |   |         |          |             |          |          | Ш         |
| _        | 17       | 1            |          |              | <u> </u>  | ╙            | L  | _            | _        | _            |   |          | 67       |                 |          |   |         |          |             |          |          |           |
| _        | 18       | 1            |          |              | L         | L            | $oxed{oxed}$   | $oxed{oxed}$ | _        |              |   |          | 68       |                 |          |   |         |          |             |          |          |           |
| _        | 19       | 7            | _        | <u> </u>     | L         | ╙            | Щ  |              | _        | _            |   |          | 69       |                 |          |   |         |          |             |          |          | Ш         |
| 4        | 20       |              | _        | <u> </u>     | L.        | _            |  |              | _        | L.           |   |          | 70       | $\perp$         | $\Box$   |   |         |          |             |          |          | Ш         |
| _        | 21       | =            |          |              | L_        | _            | _  |              | _        | -            |   |          | 71       | $\Box$          | _        | _ |         |          |             | _        |          | Ш         |
| _        | 22       | =            | _        |              | <u> </u>  | <u> </u>     | _  | _            | _        | _            |   |          | 72       |                 |          |   |         | _        |             |          |          | Ш         |
|          | 23       | =            |          | <u> </u>     |           | H            | <u> </u>   | _            | _        | _            |   |          | 73       | $\Box$          | _        |   |         |          | _           | ш        |          | Ш         |
| _        | 24       | =            | _        | <u> </u>     | ļ         | Ŀ            | <u> </u>   | <u> </u>     | <u> </u> | <u> </u>     |   |          | 74       |                 | _        | _ |         | _        | <b>—</b>    | Ш        | _        | $\vdash$  |
| $\dashv$ | 25<br>26 | =            |          |              |           | ⊢            | ⊢  | _            | $\vdash$ | ⊢            |   |          | 75<br>76 |                 |          |   |         | _        | -           | -        | _        | $\vdash$  |
| -        | 27       | -            | $\vdash$ | $\vdash$     | ├         | ⊢            | ├  |              | -        | -            |   |          | 77       | $\vdash$        | -        | - |         | -        | -           | -        | -        | $\vdash$  |
| $\dashv$ | 28       | п            | _        | _            | -         | -            | $\vdash$   | _            | -        | -            |   |          | 78       | -               | -        | - |         | H        |             |          |          | Н         |
| $\dashv$ | 29       | -            |          | $\vdash$     | $\vdash$  | $\vdash$     | -  | $\vdash$     | ┢        | ┢╾           |   |          | 79       | -               |          |   |         | $\vdash$ |             |          |          | Н         |
| $\neg$   | 30       | -            |          | -            | $\vdash$  | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$ | _            |   |          | 80       |                 | $\dashv$ | = |         |          | -           | Н        | $\neg$   | $\vdash$  |
| $\neg$   | 31       | =            |          |              | _         | -            |  | -            |          |              |   |          | 81       |                 |          |   |         |          |             |          | -        | $\vdash$  |
| ╛        | 32       | =            |          |              |           |              |  |              | _        |              |   |          | 82       |                 |          |   |         |          |             |          |          |           |
|          | 33       | =            |          |              |           |              |  |              |          |              |   |          | 83       |                 |          |   |         |          |             |          |          |           |
|          | 34       | =            | İ        |              |           |              |  |              |          |              |   |          | 84       |                 |          |   |         |          |             |          |          |           |
|          | 35       | =            |          |              |           |              |  |              |          |              |   |          | 85       |                 |          |   |         |          |             |          |          |           |
|          | 36       | =            |          |              |           |              |  |              |          |              |   |          | 86       |                 |          |   |         |          |             |          |          |           |
|          | 37       | =            |          |              |           |              |  |              | 匚        | L            |   |          | 87       |                 |          |   |         |          |             |          |          |           |
|          | 38       | =            |          |              |           | L            | $ldsymbol{ldsymbol{ldsymbol{eta}}}$  | L            | <u> </u> | L            |   |          | 88       | Ш               | _        |   |         |          |             | Ш        |          |           |
| _        | 39       | =            |          |              | <u> </u>  |              | <u> </u>   | <u> </u>     | L        | <u> </u>     |   |          | 89       | Ш               |          |   |         |          |             | Ш        | Ш        |           |
| 4        | 40       | Щ            | _        | L            | <u> </u>  | <u> </u>     | _  | <u> </u>     | ļ        |              |   |          | 90       | Ш               |          | _ |         | Щ        | Ш           | Ш        |          | $\square$ |
| 4        | 41       | $\vdash$     |          |              |           |              |  | _            | _        | L.           |   |          | 91       | $\sqcup$        | _        | _ |         |          | ш           |          |          | Ш         |
| _        | 42       | $\vdash$     |          | <u> </u>     |           | -            | <u> </u>   | <u> </u>     | ├        | <u> </u>     |   |          | 92       | $\vdash \vdash$ | $\dashv$ | _ | _       | _        | $\vdash$    | Ш        |          | Н         |
| -        | 43       | $\vdash$     | _        | <u> </u>     | $\vdash$  | $\vdash$     | $\vdash$   | -            | ├—       | ├            |   |          | 93       |                 | _        | _ |         | -        | -           | $\vdash$ |          | $\vdash$  |
| $\dashv$ | 44<br>45 | Н            | _        | <del> </del> |           | $\vdash$     |  | $\vdash$     | $\vdash$ | $\vdash$     |   |          | 94<br>95 | $\vdash$        | -        | _ | _       | $\vdash$ | -           | Н        | $\sqcup$ | Н         |
| -        | 46       | Н            |          | $\vdash$     | $\vdash$  | ⊢            | $\vdash$   | ├            | ├─       | <del> </del> |   |          | 96       | $\vdash \vdash$ | -        | _ |         | -        | $\vdash$    | Н        | $\vdash$ | $\vdash$  |
| -        | 47       | Н            | _        | ├-           | -         |              | -  | ⊢            | ├─       | -            |   | <b></b>  | 97       | $\vdash$        | $\dashv$ | _ | _       |          | -           | Н        | $\vdash$ | Н         |
| $\dashv$ | 48       | H            | <b>-</b> | -            | ├─        | -            | $\vdash$   | $\vdash$     | -        | $\vdash$     |   | $\vdash$ | 98       | $\vdash$        |          |   |         |          | -           | $\vdash$ |          | $\dashv$  |
| $\dashv$ | 49       | H            | -        | <del> </del> | ┢         | ⊢            | $\vdash$   | Ι            | -        | ┢            |   |          | 99       |                 | $\dashv$ |   | -       | $\vdash$ | $\vdash$    | Н        | $\vdash$ | $\vdash$  |
| $\dashv$ | 50       |              |          | $\vdash$     | $\vdash$  | ┢            | <del>                                     </del>   | $\vdash$     | $\vdash$ | $\vdash$     |   |          | 100      | $\vdash$        | $\dashv$ |   | _       | -        | $\vdash$    | Н        |          | -         |
|          |          | -            |          | ш            | <b></b> - |              |  | _            | _        |              | , |          |          | ۳               |          |   |         | _        | ٠           | ш        |          |           |

| Cla   | Date              |          |               |  |  |          |  |          |  |                 |
|-------|-------------------|----------|---------------|--|--|----------|--|----------|--|-----------------|
|       |                   |          |               |  |  |          |  |          |  |                 |
| Final | Original          |          |               |  |  |          |  |          |  | }               |
|       | 101               |          |               | $\vdash$   |  |          |  | _        |  | П               |
|       | 102<br>103        |          |               | Г  |  |          |  | _        |  | П               |
|       | 103               |          |               |  |  |          |  |          |  | П               |
|       | 104               |          |               |  |  |          |  |          |  |                 |
|       | 105<br>106        |          |               |  |  |          |  |          |  |                 |
|       | 106               |          | L             |  | L  |          |  |          |  | Ш               |
|       | 107<br>108        |          | _             | _  | Ш  |          |  | _        |  | Щ               |
|       | 108               |          | _             | _  | <u> </u>   | L        |  | <u> </u> |  | Щ               |
|       | 109               |          |               |  | $ldsymbol{ldsymbol{ldsymbol{eta}}}$              |          |  | <u> </u> |  | Щ               |
|       | 110               | _        |               | _  | $\vdash$   |          | <u> </u>   | <u> </u> | L  | Ш               |
|       | 111               | $\vdash$ |               | $\vdash$   | L  | _        |  |          | _  | $\square$       |
|       | 112               | <u> </u> |               | $\vdash$   | $\vdash$   | $\vdash$ | <u> </u>   | $\vdash$ | H  | Н               |
|       | 113<br>114        | $\vdash$ | <u> </u>      | $\vdash$   | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$   | Н               |
|       | 115               | $\vdash$ | <b>-</b>      | $\vdash$   | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$   | Н               |
|       | 116               | $\vdash$ | <u> </u>      | $\vdash$   | $\vdash$   | $\vdash$ | -  | $\vdash$ | $\vdash$   | Н               |
|       | 117               | $\vdash$ | <u> </u>      | $\vdash$   | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$   | Н               |
|       | 110               |          | —             | $\vdash$   | <del>                                     </del> | -        | -  | ├        |  |                 |
|       | 118<br>119        | H        | _             | ⊢  | ┢─   | -        |  | ┝        | -  | Н               |
|       | 120               | $\vdash$ |               | -  | ┝┈   | H        | -  | $\vdash$ | -  | $\vdash$        |
|       | 121               | $\vdash$ | -             | -  | $\vdash$   |          | -  | ┢        | -  | $\vdash \vdash$ |
|       | 122               | $\vdash$ | _             | ┢┈   | ┢┈   | -        | -  | -        | -  | Н               |
|       | 121<br>122<br>123 | $\vdash$ |               | _  | ┢  | $\vdash$ | -  | _        |  | М               |
|       | 124               | _        |               | $\vdash$   | _  |          | -  |          |  | $\vdash$        |
|       | 124<br>125        | _        | $\overline{}$ | Т  | $\vdash$   |          | $\vdash$   | $\vdash$ |  | П               |
|       | 126               |          |               |  |  |          |  |          |  |                 |
|       | 127               |          |               |  |  |          |  |          |  |                 |
|       | 126<br>127<br>128 |          |               |  |  |          |  |          |  |                 |
|       | 129<br>130        |          |               |  |  |          |  |          |  |                 |
|       | 130               |          |               |  |  |          |  |          |  |                 |
|       | 131               |          |               |  |  |          |  |          |  |                 |
|       | 132<br>133        |          |               | L_   | L  |          | L_   |          |  | Ш               |
|       | 133               | <u>_</u> |               | <u> </u>   | <u> </u>   | L        | _  | <u> </u> | $ldsymbol{ldsymbol{ldsymbol{eta}}}$              | Щ               |
|       | 134               | <u> </u> | L_            | <del> </del>                                     | <u> </u>   | _        |  |          | <u> </u>   | Щ               |
|       | 135               | Щ        | _             | $\vdash$   | $\vdash$   | $\vdash$ | <u> </u>   | <u> </u> |  | Щ               |
|       | 136               | <u> </u> |               | <u> </u>   | ⊢  | <u> </u> | <u> </u>   | ⊢        | H  | Н               |
|       | 137<br>138        | ⊢        | _             | ├  | ┝  | ┝        | <u> </u>   | -        | -  | Н               |
|       | 138               | -        | _             | ├  | ├-   | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$   | $\vdash \vdash$ |
|       | 140               | $\vdash$ | $\vdash$      | ⊢  | $\vdash$   | ├        | $\vdash$   | ⊢        | $\vdash$   | $\vdash \vdash$ |
|       | 141               | $\vdash$ | $\vdash$      | $\vdash$   | $\vdash$   | $\vdash$ | $\vdash$   | -        | $\vdash$   | $\vdash \vdash$ |
|       | 142               | $\vdash$ | $\vdash$      | ├-   | $\vdash$   | $\vdash$ | -  | $\vdash$ | $\vdash$   | $\vdash$        |
|       | 143               | -        | ┢             | <del>                                     </del> | $\vdash$   | $\vdash$ | <del>                                     </del> | $\vdash$ | 一  | H               |
|       | 144               | $\vdash$ | ┢             | <del>                                     </del> | <del>                                     </del> | Ι        | Ι-   |          | ╁  | $\vdash$        |
|       | 145               | 一        | ┢             |  | $\vdash$   | $\vdash$ | $\vdash$   | T        | T  | H               |
| -     | 146               | ┰        | $\vdash$      |  | $\vdash$   | $\vdash$ |  | T        | <del>                                     </del> | $\vdash$        |
|       | 147               | Г        | Г             |  | 1  | Γ        |  | Г        | Γ  | М               |
|       | 148               | T        |               |  |  |          | T  | T        |  | М               |
|       | 149               |          |               |  |  |          |  |          |  |                 |
|       | 150               |          |               |  |  |          |  |          |  |                 |
|       |                   |          |               |  |  |          |  |          |  |                 |